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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,020	11/08/2000	Christoph Benning	MSU-04769	3130

23535 7590 06/20/2005

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EXAMINER

PAK, YONG D

ART UNIT PAPER NUMBER

1652

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/709,020	Applicant(s) BENNING ET AL.	
	Examiner Yong D. Pak	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 13 and 15-40 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1, 13 and 15-40 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1, 13 and 15-40 are pending and are under consideration..

Claim Rejections - 35 USC § 103

Response to Arguments

Applicant's arguments filed on March 23, 2005 have been fully considered but they are not persuasive.

In response to the previous Office Action, applicants have traversed the above rejections.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Applicants also argue that Benning and Essigmann et al. do not disclose nucleic acid sequences of SEQ ID NO:1, 3 or 6. Examiner disagrees. The nucleic acid sequence of SEQ ID NO:1 of the instant invention is 100% identical to the sqdX gene disclosed in Benning (figure 3, page 62), as evidenced by Guler et al. (page 545, 1st paragraph – cited on previous form PTO-892 and see Sequence Alignment on form PTO-892). The nucleic acid sequence of SEQ ID NO:3 of the instant invention is 100% identical to the sqdX gene of Bevan et al. (Bevan et al. ATF7J8 – cited on previous form PTO-892 and see Sequence Alignment on form PTO-892). The nucleic acid sequence of SEQ ID NO:6 of the instant invention is 100% identical to SQD1 gene of Essigmann

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et al. (pages 31-32 – in particular see “Cloning, expression in *E. coli* and purification of recombinant SQD1” and Sequence Alignment – form PTO-892).

Applicants also argue that neither of the above references teach steps of transfecting a host cell with the nucleic acid sequences of SEQ ID NO:1, 3 or 6. Examiner respectfully disagrees. Essigmann et al. discloses transfecting host cells with the nucleic acid sequence of SEQ ID NO:6. Furthermore, Toth et al. discloses a method of transfecting host cells with polynucleotides of interest.

In response to applicant's argument that Toth et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Toth et al. is analogous art because it teaches the state of the art concerning constructing polypeptides which can perform multiple sequential activities, including transfecting a host cell with a polynucleotide of interest.

Applicants also argue that Bidney et al. and Comai et al. are of no value since neither provide SEQ ID NOs: 1, 3 or 6. Examiner respectfully disagrees. Even though Bidney et al. and Comai et al. do not provide SEQ ID NOs: 1, 3 or 6, Comai et al. teach a method of expressing heterologous proteins in plant cells and Bidney et al. teach a method of co-expressing heterologous proteins in monocotyledonous and dicotyledonous plant cells using binary or multiple vectors, which are limitations in the claims.

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Applicants argue that Guler et al. is not a proper teaching reference because Guler et al. does not teaches SEQ ID NO:3 or 6. Examiner respectfully disagrees. Guler et al. was cited as evidence that the sqdX gene of Essigman et al. is 100% identical to SEQ D NO:1 of the instant invention.

Applicants argue that Bevan et al. is not a proper teaching reference because Guler et al. does not teaches SEQ ID NO:3 or 6. Examiner respectfully disagrees. As discussed above, Bevan et al. discloses sqdX gene that is 100% identical to nucleic acid sequence of SEQ ID NO:3 of the instant invention.

Hence, the all rejections have been maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 571-272-0935. The examiner can normally be reached 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax

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phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Yong D. Pak
Patent Examiner 1652

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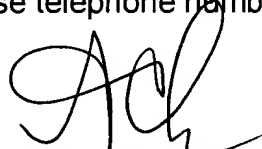
No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 571-272-0935. The examiner can normally be reached 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Yong D. Pak
Patent Examiner



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SUPERVISORY PATENT EXAMINER
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